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     FILE 'REGISTRY' ENTERED AT 13:48:35 ON 21 NOV 2008
L1                STRUCTURE UPLOADED
L2             0 S L1
L3            22 S L1 SSS FULL

     FILE 'HCAPLUS' ENTERED AT 13:49:51 ON 21 NOV 2008
L4            19 S L3
L5            10 S L4 AND (PY<2003 OR AY<2003 OR PRY<2003)

     FILE 'REGISTRY' ENTERED AT 15:17:17 ON 21 NOV 2008
L6                STRUCTURE UPLOADED
L7             0 S L6
L8                STRUCTURE UPLOADED
L9             0 S L8
L10           13 S L8 SSS FULL

     FILE 'HCAPLUS' ENTERED AT 15:19:07 ON 21 NOV 2008
L11            0 S L10/THU
L12            4 S L10
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=> file registry
COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                      ENTRY    SESSION
FULL ESTIMATED COST                                     0.21       0.21

FILE 'REGISTRY' ENTERED AT 13:48:35 ON 21 NOV 2008
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provided by InfoChem.

STRUCTURE FILE UPDATES:   20 NOV 2008  HIGHEST RN 1073589-44-2
DICTIONARY FILE UPDATES:  20 NOV 2008  HIGHEST RN 1073589-44-2

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TSCA INFORMATION NOW CURRENT THROUGH July 5, 2008.

  Please note that search-term pricing does apply when
  conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and
predicted properties as well as tags indicating availability of
experimental property data in the original document.  For information
on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

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Uploading C:\Program Files\STNEXP\Queries\10670915triazine.str
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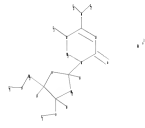

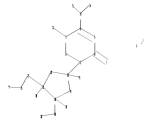

chain nodes :
7 8 12 13 15 16 23 24 25 27 28 29 30 31
ring nodes :
1 2 3 4 5 6 18 19 20 21 22
chain bonds :
1-18 3-12 4-13 6-7 13-15 13-16 18-31 20-24 20-29 21-23 21-30 23-25 24-28
25-27
ring bonds :
1-2 1-6 2-3 3-4 4-5 5-6 18-19 18-22 19-20 20-21 21-22
exact/norm bonds :
1-2 1-6 1-18 2-3 3-4 3-12 4-5 4-13 5-6 6-7 13-15 13-16 18-19 18-22
19-20 20-21 20-24 21-22 24-28 25-27
exact bonds :
18-31 20-29 21-23 21-30 23-25

G1:H,[*1]

G2:C,H

G3:C,H,P

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Connectivity :
8:1 X maximum RC ring/chain
Match level :
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15:CLASS  16:CLASS  18:Atom  19:Atom  20:Atom  21:Atom  22:Atom  23:CLASS  24:CLASS
 25:CLASS
27:CLASS  28:CLASS  29:CLASS  30:CLASS  31:CLASS
Generic attributes :
8:
Saturation             : Saturated



L1      STRUCTURE UPLOADED

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SAMPLE SEARCH INITIATED 13:49:04 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED -     1782 TO ITERATE

100.0% PROCESSED     1782 ITERATIONS                                 0 ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS:  ONLINE  **COMPLETE**
                        BATCH   **COMPLETE**
PROJECTED ITERATIONS:        33108 TO    38172
PROJECTED ANSWERS:               0 TO        0

L2            0 SEA SSS SAM L1

=> d l1
L1 HAS NO ANSWERS
L1              STR
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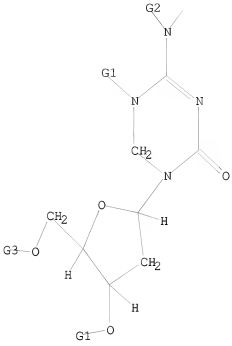


G1 H,[@1]

G2 C,H

G3 C,H,P

Structure attributes must be viewed using STN Express query preparation.

=> s l1 sss full
FULL SEARCH INITIATED 13:49:19 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 36587 TO ITERATE

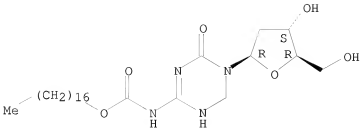
100.0% PROCESSED 36587 ITERATIONS 22 ANSWERS
SEARCH TIME: 00.00.04

L3 22 SEA SSS FUL L1

=> d l3 scan

L3 22 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN
IN Carbamic acid, [5-(2-deoxy-β-D-erythro-pentofuranosyl)-1,4,5,6-tetrahydro-4-oxo-1,3,5-triazin-2-yl]-, heptadecyl ester (9CI)
MF C26 H48 N4 O6

Absolute stereochemistry.

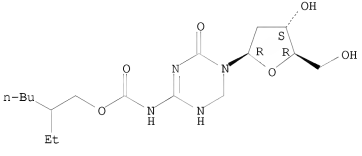


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):2

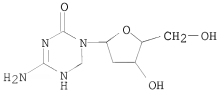
L3 22 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN
IN Carbamic acid, [5-(2-deoxy-β-D-erythro-pentofuranosyl)-1,4,5,6-tetrahydro-4-oxo-1,3,5-triazin-2-yl]-, 2-ethylhexyl ester (9CI)
MF C17 H30 N4 O6

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L3 22 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN
IN 1,3,5-Triazin-2(1H)-one, 4-amino-1-(2-deoxypentofuranosyl)-3,6-dihydro-(9CI)
MF C8 H14 N4 O4



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**PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT**


HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):0

=> file hcaplus
COST IN U.S. DOLLARS                            SINCE FILE      TOTAL
                                                  ENTRY    SESSION
FULL ESTIMATED COST                              178.82     179.03

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FILE COVERS 1907 - 21 Nov 2008  VOL 149 ISS 22
FILE LAST UPDATED: 20 Nov 2008  (20081120/ED)

HCAplus now includes complete International Patent Classification (IPC)
reclassification data for the third quarter of 2008.

New CAS Information Use Policies, enter HELP USAGETERMS for details.

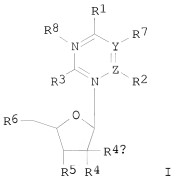
 This file contains CAS Registry Numbers for easy and accurate
 substance identification.

=> s l3
L4          19 L3

=> s l4 and (PY<2003 or AY<2003 or PRY<2003)
      22961893 PY<2003
       4500185 AY<2003
       3968543 PRY<2003
L5          10 L4 AND (PY<2003 OR AY<2003 OR PRY<2003)

=> d l5 1-10 ti abs bib

L5   ANSWER 1 OF 10  HCAPLUS  COPYRIGHT 2008 ACS on STN
TI   Treatment of viral diseases by 1,3,5-triazine nucleoside and nucleotide
     analogs, and preparation thereof
GI
```



I

AB The invention discloses a genus of nucleoside or nucleotide analogs I, wherein Y = C, CH, N; Z = C, CH, B; R1 = H, acyl, OR9, SR9, substituted sec-amine, NHNH2, O, :NR9; R9 is H, alkyl, acyl, heteroalkyl, aryl; R2 = absent, H, acyl, alkyl, halogen, O, substituted o, substituted N; R3 = H, acyl, alkyl, substituted sec-amine, substituted oxime, substituted S, O, substituted O; R4, R4a = H, halo, OMe, OH; R5, R6 = H, OR14 (R14 = H, (un)substituted alkyl); R7, R8 = absent, H, acyl, alkyl; R1R8 together with the atom to which they are attached form cycloalkyl, heterocycloalkyl; were prepared for use as antiviral agents. In another aspect, the nucleoside and nucleotide analogs I are used to treat a viral disease by administering a therapeutically effective amount of I to patient with a viral disease which is caused by an RNA virus, a DNA virus, a retrovirus, or HIV. Thus, 2'-deoxy-5,6-dihydro-5-azacytidine palmitate was prepared and was tested in vitro and in rats and dogs as antiviral agent.

AN 2007:993619 HCAPLUS <<LOGINID::20081121>>

DN 147:315014

TI Treatment of viral diseases by 1,3,5-triazine nucleoside and nucleotide analogs, and preparation thereof

IN Daifuku, Richard; Gall, Alexander; Sergueev, Dmitri

PA Koronis Pharmaceuticals, Inc., USA

SO U.S. Pat. Appl. Publ., 55pp., Cont.-in-part of U.S. Ser. No. 670,915. CODEN: USXXCO

DT Patent

LA English

FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 20070207973	A1	20070906	US 2006-616693	20061227 <--
	US 20040127436	A1	20040701	US 2003-670915	20030924 <--
	US 20070142310	A1	20070621	US 2007-671964	20070206 <--
PRAI	US 2002-413337P	P	20020924	<--	
	US 2003-670915	A2	20030924		

OS MARPAT 147:315014

L5 ANSWER 2 OF 10 HCAPLUS COPYRIGHT 2008 ACS on STN

TI Compounds, compositions and methods for modulating fat metabolism for treatment of metabolic disorders

AB Methods and compns. of identifying candidate compds., for modulating fat metabolism and/or inhibiting Apobec-1 activity are provided. The invention relates to compds. and pharmaceutical compns. which are useful for regulating fat metabolism and can be used for treatment of diseases and disorders selected from the group consisting of overweight, obesity, atherosclerosis, hypertension, non-insulin dependent diabetes mellitus, pancreatitis, hypercholesteremia, hypertriglyceridemia, hyperlipidemia.

AN 2004:368857 HCAPLUS <<LOGINID::20081121>>
DN 140:386000
TI Compounds, compositions and methods for modulating fat metabolism for treatment of metabolic disorders
IN Gaudriault, Georges; Kilinc, Ahmet; Bousquet, Olivier; Goupil-Lamy, Anne; Harosh, Itzik
PA Obetherapy Biotechnology, Fr.
SO PCT Int. Appl., 461 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2004037159	A2	20040506	WO 2003-IL860	20031023 <--
	WO 2004037159	A3	20040715		
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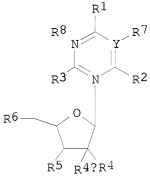
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	AU 2003274652	A1	20040513	AU 2003-274652	20031023 <--
PRAI	US 2002-420316P	P	20021023	<--	
	WO 2003-IL860	W	20031023		
OS	MARPAT 140:386000				

L5 ANSWER 3 OF 10 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Treatment of viral diseases by 1,3,5-triazine nucleoside and nucleotide analogs, and preparation thereof
GI



I

AB The invention discloses a genus of nucleoside or nucleotide analogs I [Y=C, CH, N; Z=C,CH,B; R1=H, acyl, NHNH2, etc; R2=absent, H, acyl, etc; R3=H, acyl, (un)substituted alkyl, etc.; R4, R4a=H, halo, OMe, OH; R5, R6=H, OR14 (R14= H, (un)substituted alkyl, etc.;) R7,R8=absent, H, acyl, etc.] for use as antiviral agents. In a first aspect, there is provided a compound according to Formula I as shown. In another aspect, the nucleoside and nucleotide analogs according to Formula I are used to treat a viral disease by administrating a therapeutically effective amount of a compound of

Formula I to patient with a viral disease which is caused by an RNA virus, a DNA virus, a retrovirus, or HIV. Preparation of selected analogs is described.

AN 2004:290464 HCAPLUS <<LOGINID::20081121>>

DN 140:297477

TI Treatment of viral diseases by 1,3,5-triazine nucleoside and nucleotide analogs, and preparation thereof

IN Daifuku, Richard; Gall, Alexander; Sergueev, Dmitri

PA Koronis Pharmaceuticals, Incorporated, USA

SO PCT Int. Appl., 108 pp.
CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2004028454	A2	20040408	WO 2003-US30200	20030924 <--
	WO 2004028454	A3	20041118		
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	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
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	AU 2003278904	A1	20040419	AU 2003-278904	20030924 <--
	EP 1545558	A2	20050629	EP 2003-770420	20030924 <--
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
	JP 2006507255	T	20060302	JP 2004-539890	20030924 <--
PRAI	US 2002-413337P	P	20020924	<--	
	WO 2003-US30200	W	20030924		

OS MARPAT 140:297477

L5 ANSWER 4 OF 10 HCAPLUS COPYRIGHT 2008 ACS on STN

TI Biochemical pharmacology and DNA methylation studies of arabinosyl 5-azacytidine and 5,6-dihydro-5-azacytidine in two human leukemia cell lines PER-145 and PER-163

AB 1-β-D-Arabinofuranosyl-5-azacytosine (ara-AC) and 5,6-dihydro-5-azacytidine (DHAC) are two new antitumor agents under clin. investigations, which exhibit the chemical similarities found in the tumoricidal drug cytosine arabinoside (ara-C) and the nitrogen substitution in the 5 position of the pyrimidine ring found in 5-azacytidine (5-aza-C). The cellular anabolism of ara-AC and DHAC and their effect on DNA methylation have been examined in two new human leukemia cell lines, which are sensitive (PER-145) and resistant (PER-163) to ara-C. The triphosphate anabolite of ara-AC, ara-ACTP, was the major cellular anabolite in the cellular exts. of the PER-145 cells, reaching a cellular saturation concentration of 64.1 μM using 25 μM of the drug. Only trace levels of ara-ACTP were detected in the PER-163 cell line, which lacks deoxycytidine kinase, after exposure to a similar concentration Notably, after 1 mM, the ara-ACTP concentration averaged 12 μM. DHAC was anabolized by both cell lines to a similar degree but required much higher nucleoside concns. (100 μM or higher) to achieve similar cellular concns. of its triphosphate, DHACTP. Although the deoxy derivative, DHAdCTP, was detected in both cell lines, it was detected at 1-2 log10 lower concns. than DHACTP. DNA methylation studies showed that DHAC had a profound effect in inducing

DNA hypomethylation in both cell lines, with nadir values of 27.3 and 29.2% of control. Ara-AC induced 45% DNA hypomethylation in PER-145 cells, but did not alter the DNA methylation pattern in PER-163 cells, except when they were exposed to 1 mM of the drug for 24 h. These results could be explained by the differential biochem. activation of these drugs in the human leukemia cell lines.

AN 1995:550185 HCAPLUS <<LOGINID::20081121>>
DN 123:25321
OREF 123:4480h,4481a
TI Biochemical pharmacology and DNA methylation studies of arabinosyl 5-azacytidine and 5,6-dihydro-5-azacytidine in two human leukemia cell lines PER-145 and PER-163
AU Kees, Ursula R.; Avramis, Vassilios I.
CS Inst. Child Health Res., Princess Margaret Hosp., West Perth, Australia
SO Anti-Cancer Drugs (1995), 6(2), 303-10
CODEN: ANTDEV; ISSN: 0959-4973
PB Rapid Science Publishers
DT Journal
LA English

L5 ANSWER 5 OF 10 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Polarographic reduction and potential carcinogenicity of synthetic 1,3,5-triazine bases and nucleosides
AB DC polarog. parameters were measured for a series of 15 synthetic 5-aza compds. derived from cytosine, cytidine, uracil and uridine in nonaq. (dimethylformamide) solns. The substances in aprotic media are reduced in a single two-electron step at the mercury drop electrode, except for 5,6-dihydro derivs. of 5-azauracil and 5-azauridine which are reduced in two steps. α-Lipoic acid was added to the solns. of the substances, and the slopes tg α of the plots of diffusion current of the substances vs. α-lipoic acid concentration, which can serve as an index of potential carcinogenic activity of the substances measured, were determined The tg α values of all the compds. studied are low as compared to related substances whose carcinogenic activity has been proved. 5-Azacytidine and 5-azauracil are exceptions exhibiting tg α values of 0.295 and 0.400, resp. For the former compound, this is consistent with the WHO classification as "probably carcinogenic to humans".
AN 1994:570013 HCAPLUS <<LOGINID::20081121>>
DN 121:170013
OREF 121:30587a,30590a
TI Polarographic reduction and potential carcinogenicity of synthetic 1,3,5-triazine bases and nucleosides
AU Novotny, Ladislav; Vachalkova, Anna; Piskala, Alois
CS Cancer Research Institute, Slovak Academy Sciences, Bratislava, 812 32, Slovakia
SO Collection of Czechoslovak Chemical Communications (1994), 59(7), 1691-8
CODEN: CCCCAK; ISSN: 0010-0765
DT Journal
LA English

L5 ANSWER 6 OF 10 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Formation of triple helix complexes of single stranded nucleic acids using oligonucleotides
AB Triplex helix structure with a specific segment of single-stranded nucleic acid can be formed with 1st and 2nd oligomers comprised of nucleosidyl units linked by internucleosidyl phosphorus linkages . The 1st oligomer is sufficiently complementary to the target segment to form duplex and the 2nd oligomer has ≥7 nucleotidyl units that are sufficiently complementary to hybridize with the duplex to form triplex. Upon formation of the triple helix the nucleic acids of interest may be

detected and its function or expression prevented. The 1st and 2nd oligomers may comprise an oligonucleotide, an alkyl- or aryl-phosphonothioate oligomer, or other analogs, e.g. methylphosphonate oligomers. They may also contain uncharged neutral oligomers and purine or pyrimidine analogs, e.g., 2'-O-Me-pseudoisocytidine, 6-Se-guanine, or 6-isopropylidene-7-deaza-guanidine. One of applications of this method is to inhibit in vivo synthesis of a protein by targeting its mRNA, which can be used for treatment of diseases, e.g. viral infections and cancers.

AN 1993:575369 HCAPLUS <<LOGINID::20081121>>
DN 119:175369
OREF 119:31207a,31210a
TI Formation of triple helix complexes of single stranded nucleic acids using oligonucleotides
IN Ts'O, Paul On Pong; Adams, Thomas Henry; Arnold, Lyle J., Jr.
PA Johns Hopkins University, USA; Genta Inc.
SO PCT Int. Appl., 98 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 6

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9307295	A1	19930415	WO 1992-US8458	19921005 <--
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	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, SE				
	AU 9227852	A	19930503	AU 1992-27852	19921005 <--
	JP 07501936	T	19950302	JP 1992-507113	19921005 <--
	EP 650526	A1	19950503	EP 1992-921942	19921005 <--
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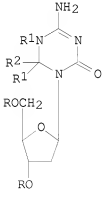
	AU 9724881	A	19970904	AU 1997-24881	19970613 <--
PRAI	US 1991-772081	A	19911007	<--	
	US 1986-924234	B2	19861028	<--	
	US 1989-368027	B2	19890619	<--	
	WO 1992-US8458	A	19921005	<--	
	US 1992-978937	B1	19921118	<--	
	US 1994-194731	B1	19940210	<--	

L5 ANSWER 7 OF 10 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Preparation of 2'-deoxy-5,6-dihydro-5-azacytidine as a new 2'-deoxycytidine analog
GI



I

AB The title compound (I; R = R1 = R2 = H) (II) a new 2'-deoxycytidine analog having a N atom as an isoelectronic replacement for the CH group in the position 5, was prepared by reduction of (un)protected 2'-deoxy-5-azacytidine I (R = H, acyl; R1R1= bond, R2 = H) by 5-10 equiv Zn in an anhydrous C1-4 carboxylic acid, e.g. AcOH, at room temperature followed by deprotection (when appropriate) and/or neutralization by a nontoxic (in)organic acid. When R = acyl, the reduction was carried out in the presence of an excess MeC(OMe)2Me. Thus, a mixture of AcOH and MeC(OMe)2Me was allowed to stand for 24 h at room temperature and treated with Zn powder and then with 2'-deoxy-3',5'-di-O-p-toluoyl-5-azacytidine. The whole was stirred vigorously for 2.5 h at the ambient temperature to give 76% of the 5,6-dihydro intermediate isolated as an acetate. This in MeOH was stirred 24 h at ambient temperature with 1M MeONa in MeOH to give 84% II which was converted to II.HOAc (90%).
AN 1990:631939 HCAPLUS <<LOGINID::20081121>>
DN 113:231939
OREF 113:39156h,39157a
TI Preparation of 2'-deoxy-5,6-dihydro-5-azacytidine as a new 2'-deoxycytidine analog
IN Piskala, Alois; Cesnekova, Barbara; Vesely, Jiri
PA Czech.
SO Czech., 5 pp.
CODEN: CZXXA9
DT Patent
LA Czech
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI CS 264454	B1	19890814	CS 1987-6304	19870828 <--
PRAI CS 1987-6304		19870828	<--	

OS MARPAT 113:231939

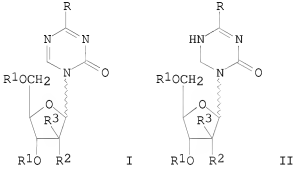
L5 ANSWER 8 OF 10 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Synthesis of oligonucleotides containing 5,6-dihydro-5-azacytosine and 5-azacytosine at specific CpG sites
AB A symposium communication on the quant. conversion of dihydro-5-azacytosine (5-DHAC) to 5-azacytosine (5-AC) in a dihydro-5-azacytidine/thymidine dimer (5-DHACpT). This newly developed procedure allows similar possibilities with longer, 5-DHAC-modified oligodeoxynucleotides.
AN 1990:99111 HCAPLUS <<LOGINID::20081121>>
DN 112:99111
OREF 112:16875a,16878a
TI Synthesis of oligonucleotides containing 5,6-dihydro-5-azacytosine and 5-azacytosine at specific CpG sites
AU Goddard, Amanda J.; Marquez, Victor E.
CS Lab. Med. Chem., Natl. Cancer Inst., Bethesda, MD, 20892, USA
SO Nucleosides & Nucleotides (1989), Volume Date 1988, 8(5-6), 1015-18
CODEN: NUNUD5; ISSN: 0732-8311
DT Journal
LA English

L5 ANSWER 9 OF 10 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Cellular metabolism of 5,6-dihydro-5-azacytidine and its incorporation into DNA and RNA of human lymphoid cells CEM/O and CEM/dCk(-)
AB 5,6-Dihydro-5-azacytidine (DHAC) is a hydrolytically stable analog of 5-azacytidine (5-aza-C) that has antileukemic activity against expt1. leukemias and, like 5-aza-C, causes DNA hypomethylation. The authors report the cellular metabolism of DHAC and its incorporation into nucleic acids in the CCRF/CEM/O and deoxycytidine kinase mutant CCRF/CEM/dCk(-)

human lymphoid cell lines. The major anabolite of [3H]DHAC, [3H]DHACTP, peaked at 110.3 μM in CEM/O and at 96.3 μM in CEM/dCk(-) cells at 9 and 12 h, resp. The intracellular concns. of the deoxyribonucleoside triphosphate, [3H]DHAdCTP, peaked at 13.5 μM at 4 h in CEM/O and at 80.8 μM at 12 h, a 6-fold greater cellular concentration, in the dCk mutant cell line. The amount of DHAC anabolites incorporated into CEM/O nucleic acids reached a plateau in RNA at 552.6 pmol/10^7 cells and in DNA at 64.55 pmol/10^7 cells. In CEM/dCk(-) cells, DHAC anabolites reached a plateau in RNA and DNA at 4,256.3 and 395.5 pmol/10^7 cells, resp. Thus, with equitoxic treatments of DHAC, the incorporation of its analog anabolites into RNA and DNA was 8- and 6-fold greater in CEM/dCk(-) cells. DNA methylation levels were depressed equally despite a 6-fold greater incorporation of the analog in DNA in the CEM/dCk(-) cells, indicating that hypomethylation may be saturated after DHAC treatment. The DNA methylation levels reached a nadir of 0.19% and 0.20% methyl-C (percentage of methylation) in the two cell lines at 6 and 12 h after the beginning of drug treatment and remained relatively constant for the duration of the 24-h treatment. A curvilinear relationship was obtained between the DNA methylation levels in both cell lines and the amts. of DHAC anabolite incorporated into DNA.

AN 1989:489722 HCAPLUS <<LOGINID::20081121>>
DN 111:89722
OREF 111:14893a,14896a
TI Cellular metabolism of 5,6-dihydro-5-azacytidine and its incorporation into DNA and RNA of human lymphoid cells CEM/O and CEM/dCk(-)
AU Avramis, Vassilios I.; Powell, William C.; Mecum, Robert A.
CS Sch. Med., Univ. South. California, Los Angeles, CA, 90027, USA
SO Cancer Chemotherapy and Pharmacology (1989), 24(3), 155-60
CODEN: CCPHDZ; ISSN: 0344-5704
DT Journal
LA English

L5 ANSWER 10 OF 10 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Preparation and biological activity of 5,6-dihydro-5-azapyrimidine nucleosides
GI



AB The reaction of 5-azapyrimidine nucleosides I (R = NH2, R1 = R3 = H, R2 = OH, β-anomer; R = NH2, R1 = R2 = R3 = H, α- or β-anomer; R = R2 = OH, R1 = R3 = H, β-anomer; etc., 9 compds.) with zinc powder in AcOH afforded the resp. 5,6-dihydro derivs. II in high yields. This procedure represents a convenient and general method for preparation of the title compds. The effects of some dihydro-5-azapyrimidine nucleosides on the growth in vitro of L1210 mouse leukemic cells were estimated

```
AN   1988:423285  HCAPLUS <<LOGINID::20081121>>
DN   109:23285
OREF 109:3997a,4000a
TI   Preparation and biological activity of 5,6-dihydro-5-azapyrimidine
     nucleosides
AU   Piskala, Alois; Cesnekova, Barbara; Vesely, Jiri
CS   Inst. Org. Chem. Biochem., Czech. Acad. Sci., Prague, 166 10, Czech.
SO   Nucleic Acids Symposium Series (1987), 18(Symp. Chem. Nucleic
     Acid Compon., 7th, 1987), 57-60
     CODEN: NACSD8; ISSN: 0261-3166
DT   Journal
LA   English
OS   CASREACT 109:23285


=> d his

     (FILE 'HOME' ENTERED AT 13:48:12 ON 21 NOV 2008)

     FILE 'REGISTRY' ENTERED AT 13:48:35 ON 21 NOV 2008
L1             STRUCTURE UPLOADED
L2           0 S L1
L3          22 S L1 SSS FULL

     FILE 'HCAPLUS' ENTERED AT 13:49:51 ON 21 NOV 2008
L4          19 S L3
L5          10 S L4 AND (PY<2003 OR AY<2003 OR PRY<2003)

=> log hold
COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                       ENTRY    SESSION
FULL ESTIMATED COST                                    31.79     210.82

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)          SINCE FILE      TOTAL
                                                       ENTRY    SESSION
CA SUBSCRIBER PRICE                                    -8.00      -8.00

 SESSION WILL BE HELD FOR 120 MINUTES
STN INTERNATIONAL SESSION SUSPENDED AT 13:50:20 ON 21 NOV 2008

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Welcome to STN International!  Enter x:X

LOGINID:SSPTAEXO1623

PASSWORD:
 * * * * * * RECONNECTED TO STN INTERNATIONAL * * * * * *
SESSION RESUMED IN FILE 'HCAPLUS' AT 15:16:58 ON 21 NOV 2008
FILE 'HCAPLUS' ENTERED AT 15:16:58 ON 21 NOV 2008
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COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                       ENTRY    SESSION
FULL ESTIMATED COST                                    31.79     210.82

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)          SINCE FILE      TOTAL
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CA SUBSCRIBER PRICE -8.00 -8.00

=> file registry
COST IN U.S. DOLLARS SINCE FILE ENTRY TOTAL SESSION
FULL ESTIMATED COST 34.48 213.51

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) SINCE FILE ENTRY TOTAL SESSION
CA SUBSCRIBER PRICE -8.00 -8.00

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DICTIONARY FILE UPDATES: 20 NOV 2008 HIGHEST RN 1073589-44-2

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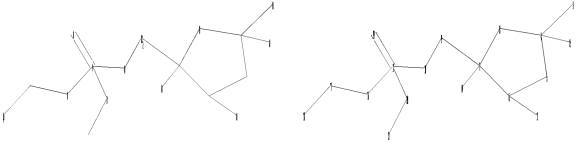
on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

=>
Uploading C:\Program Files\STNEXP\Queries\10670915protecting.str



chain nodes :
1 9 10 12 13 14 15 16 17 18 19 20 21
ring nodes :
4 5 6 7 8
chain bonds :
1-4 4-15 6-13 7-9 7-14 9-10 10-12 12-16 12-19 12-20 16-17 17-18 20-21

ring bonds :
4-5 4-8 5-6 6-7 7-8
exact/norm bonds :
1-4 4-5 4-8 5-6 6-7 7-8 10-12 12-16 12-19 12-20 16-17 17-18 20-21

```
exact bonds :
4-15  6-13  7-9  7-14  9-10


G1:H

G2:C,H

G3:C,H,P

Match level :
1:CLASS  4:Atom  5:Atom  6:Atom  7:Atom  8:Atom  9:CLASS  10:CLASS  12:CLASS
13:CLASS
14:CLASS  15:CLASS  16:CLASS  17:CLASS  18:Atom  19:CLASS  20:CLASS  21:CLASS
Generic attributes :
18:
Saturation             : Unsaturated




L6      STRUCTURE UPLOADED

=> s l6
SAMPLE SEARCH INITIATED 15:17:32 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED -     3052 TO ITERATE

 65.5% PROCESSED     2000 ITERATIONS                                  0 ANSWERS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS:  ONLINE  **COMPLETE**
                        BATCH   **COMPLETE**
PROJECTED ITERATIONS:        57727 TO    64353
PROJECTED ANSWERS:               0 TO        0

L7            0 SEA SSS SAM L6

=> d l6
L6 HAS NO ANSWERS
L6              STR
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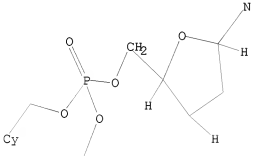


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G1 H
G2 C,H
G3 C,H,P
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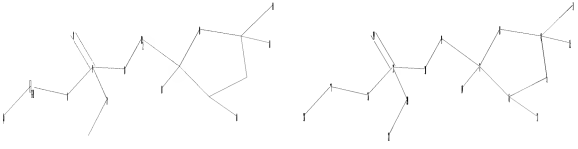
Uploading C:\Program Files\STNEXP\Queries\10670915protecting2.str



chain nodes :
1 9 10 12 13 14 15 16 17 18 19 20 21
ring nodes :
4 5 6 7 8
chain bonds :
1-4 4-15 6-13 7-9 7-14 9-10 10-12 12-16 12-19 12-20 16-17 17-18 20-21

ring bonds :
4-5 4-8 5-6 6-7 7-8
exact/norm bonds :
1-4 4-5 4-8 5-6 6-7 7-8 10-12 12-16 12-19 12-20 16-17 17-18 20-21
exact bonds :
4-15 6-13 7-9 7-14 9-10

G1:H

G2:C,H

G3:C,H,P

Match level :
1:CLASS 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:CLASS 10:CLASS 12:CLASS
13:CLASS
14:CLASS 15:CLASS 16:CLASS 17:CLASS 18:Atom 19:CLASS 20:CLASS 21:CLASS
Generic attributes :
18:
Saturation : Unsaturated

L8 STRUCTURE UPLOADED

=> s l8
SAMPLE SEARCH INITIATED 15:18:32 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 3052 TO ITERATE

65.5% PROCESSED 2000 ITERATIONS 0 ANSWERS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.01

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FULL FILE PROJECTIONS:  ONLINE   **COMPLETE**
                        BATCH    **COMPLETE**
PROJECTED ITERATIONS:          57727 TO    64353
PROJECTED ANSWERS:                 0 TO        0

L9             0 SEA SSS SAM L8

=> d l8
L8 HAS NO ANSWERS
L8                STR
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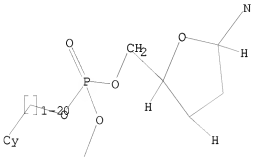



```
G1 H
G2 C,H
G3 C,H,P


Structure attributes must be viewed using STN Express query preparation.


=> s l8 sss full
FULL SEARCH INITIATED 15:18:45 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED -    61945 TO ITERATE

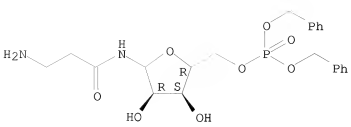
100.0% PROCESSED    61945 ITERATIONS                                 13 ANSWERS
SEARCH TIME: 00.00.04

L10           13 SEA SSS FUL L8

=> d l10 scan

L10  13 ANSWERS   REGISTRY  COPYRIGHT 2008 ACS on STN
IN   Propanamide, 3-amino-N-[5-O-[bis(phenylmethoxy)phosphinyl]-D-
     ribofuranosyl]-
MF   C22 H29 N2 O8 P

Absolute stereochemistry.
```

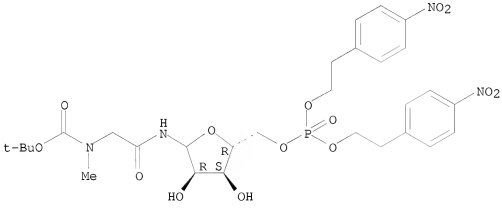


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):3

L10 13 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN
IN Carbamic acid, [2-[[5-O-[bis[2-(4-nitrophenyl)ethoxy]phosphinyl]-D-ribofuranosyl]amino]-2-oxoethyl]methyl-, 1,1-dimethylethyl ester (9CI)
MF C29 H39 N4 O14 P

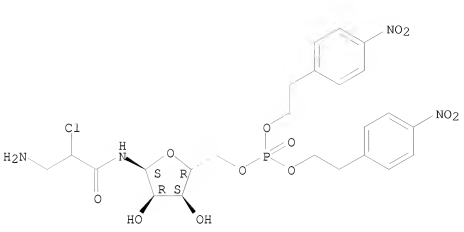
Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L10 13 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN
IN Propanamide, 3-amino-N-[5-O-[bis[2-(4-nitrophenyl)ethoxy]phosphinyl]-α-D-ribofuranosyl]-2-chloro-
MF C24 H30 Cl N4 O12 P

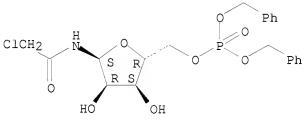
Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L10 13 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN
IN Acetamide, N-[5-O-[bis(phenylmethoxy)phosphinyl]-α-D-ribofuranosyl]-2-chloro-
MF C21 H25 Cl N O8 P

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):0

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FILE LAST UPDATED: 20 Nov 2008 (20081120/ED)

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=> s l10/thu
             4 L10
       1070979 THU/RL
L11          0 L10/THU
                 (L10 (L) THU/RL)

=> s l10
L12          4 L10

=> d l12 1-4 ti bas bib hitstr
'BAS' IS NOT A VALID FORMAT FOR FILE 'HCAPLUS'

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DALL -------- ALL, delimited (end of each field identified)
DMAX -------- MAX, delimited for post-processing
FAM --------- AN, PI and PRAI in table, plus Patent Family data
FBIB -------- AN, BIB, plus Patent FAM
IND --------- Indexing data
IPC --------- International Patent Classifications
MAX --------- ALL, plus Patent FAM, RE
PATS -------- PI, SO
SAM --------- CC, SX, TI, ST, IT
SCAN -------- CC, SX, TI, ST, IT (random display, no answer numbers;
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              e.g., D SCAN or DISPLAY SCAN)
STD --------- BIB, CLASS

IABS -------- ABS, indented with text labels
IALL -------- ALL, indented with text labels
IBIB -------- BIB, indented with text labels
IMAX -------- MAX, indented with text labels
```

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ISTD -------- STD, indented with text labels

OBIB -------- AN, plus Bibliographic Data (original)
OIBIB ------- OBIB, indented with text labels

SBIB -------- BIB, no citations
SIBIB ------- IBIB, no citations

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HITIND ------ IC, ICA, ICI, NCL, CC and index field (ST and IT)
              containing hit terms
HITRN ------- HIT RN and its text modification
HITSTR ------ HIT RN, its text modification, its CA index name, and
              its structure diagram
HITSEQ ------ HIT RN, its text modification, its CA index name, its
              structure diagram, plus NTE and SEQ fields
FHITSTR ----- First HIT RN, its text modification, its CA index name, and
              its structure diagram
FHITSEQ ----- First HIT RN, its text modification, its CA index name, its
              structure diagram, plus NTE and SEQ fields
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OCC --------- Number of occurrence of hit term and field in which it occurs

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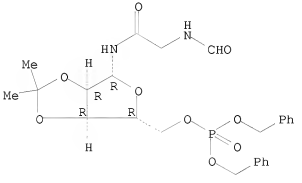
FHITSTR, HITSEQ, FHITSEQ, KWIC, and OCC) may be used with DISPLAY ACC
to view a specified Accession Number.
ENTER DISPLAY FORMAT (BIB):ti abs bib hitstr

L12  ANSWER 1 OF 4  HCAPLUS  COPYRIGHT 2008 ACS on STN
TI   Evaluation of the Kinetic Mechanism of Escherichia coli Glycinamide
     Ribonucleotide Transformylase
AB   A kinetic scheme is presented for Escherichia coli glycinamide
     ribonucleotide transformylase (GAR transformylase, EC 2.1.2.2) based on a
     steady-state and pre-steady-state kinetic anal. of the reaction in both
     directions employing stopped-flow absorbance and fluorescence
     spectroscopy.  Steady-state parameters showed that kcat for the reverse
     direction is about 10 times lower than that for the forward direction
     although the Km values for formyl dideazafolate and dideazafolate or for
     glycinamide ribonucleotide and formyl glycinamide ribonucleotide are
     similar.  No pre-steady-state transient was observed in either direction, and
     the single-turnover rate constant under saturating levels of substrates in each
     direction was found to be very close to the resp. steady-state kcat value.
     This indicates that steps involving ternary complexes are rate-determining for
     steady-state turnover in each direction.  By conducting the
     single-turnover reactions under various preincubation and mixing
     conditions, a random sequential kinetic mechanism was implicated in which
     the enzyme binds glycinamide ribonucleotide or formyl dideazafolate
     productively in no obligatory order.  The collective data provided a
     quant. kinetic scheme to serve as a basis for the anal. of mutations.
AN   1998:331812  HCAPLUS <<LOGINID::20081121>>
DN   129:92160
OREF 129:18915a,18918a
TI   Evaluation of the Kinetic Mechanism of Escherichia coli Glycinamide
     Ribonucleotide Transformylase
```

AU Shim, Jae Hoon; Benkovic, Stephen J.
CS Department of Chemistry 152 Davey Laboratory, Pennsylvania State University, University Park, PA, 16802, USA
SO Biochemistry (1998), 37(24), 8776-8782
CODEN: BICHAW; ISSN: 0006-2960
PB American Chemical Society
DT Journal
LA English
IT 209664-71-1P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(kinetic mechanism of Escherichia coli glycinamide ribonucleotide transformylase)
RN 209664-71-1 HCAPLUS
CN Acetamide, N-[5-O-[bis(phenylmethoxy)phosphinyl]-2,3-O-(1-methylethylidene)-β-D-ribofuranosyl]-2-(formylamino)- (CA INDEX NAME)

Absolute stereochemistry.

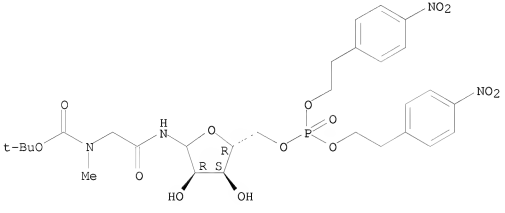


RE.CNT 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 2 OF 4 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Substrate specificity of glycinamide ribonucleotide transformylase from chicken liver
AB Several glycinamide ribonucleotide analogs have been prepared and evaluated as substrates and/or inhibitors of glycinamide ribonucleotide transformylase from chicken liver. The side chain modified analogs, in which the glycine side chain, R = CH_2NH_2, has been replaced by R = CH_2NHCH_3 and R = $CH_2CH_2NH_2$, are substrates, with V/K (relative intensity) of 2.4% and 16.3%, resp. Several carbocyclic analogs of glycinamide ribonucleotide, including the phosphonate derivative of carbocyclic glycinamide ribonucleotide, did not serve as substrates, but were inhibitors of the enzyme, competitive against glycinamide ribonucleotide, with Ki values ranging from 7.4 to 23.6 times the Km for glycinamide ribonucleotide. However, the O-phosphonate analog of carbocyclic glycinamide ribonucleotide did support enzymic activity, with V/K (relative intensity) of 0.8%. In addition, glycinamide ribonucleoside was neither a substrate for, nor an inhibitor of, glycinamide ribonucleotide transformylase. Furthermore, α-glycinamide ribonucleotide had no effect on enzyme activity. These studies have begun to define the structural features of the nucleotide substrate required to support enzymic activity.
AN 1996:175342 HCAPLUS <<LOGINID::20081121>>

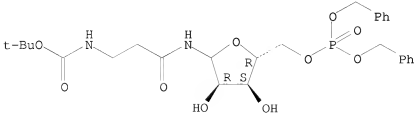
DN 124:254209
OREF 124:46953a,46956a
TI Substrate specificity of glycinamide ribonucleotide transformylase from chicken liver
AU Antle, Vincent D.; Liu, Dashan; McKellar, B. Robert; Caperelli, Carol A.; Hua, Mei; Vince, Robert
CS Division Pharmaceutical Sciences, University Cincinnati Medical Center, Cincinnati, OH, 45267-0004, USA
SO Journal of Biological Chemistry (1996), 271(11), 6045-9
CODEN: JBCHA3; ISSN: 0021-9258
PB American Society for Biochemistry and Molecular Biology
DT Journal
LA English
IT 174818-85-0P 174818-90-7P 174818-91-8P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(substrate and inhibitor specificity of glycinamide ribonucleotide transformylase from chicken liver)
RN 174818-85-0 HCAPLUS
CN Carbamic acid, [2-[[5-O-[bis[2-(4-nitrophenyl)ethoxy]phosphinyl]-D-ribofuranosyl]amino]-2-oxoethyl]methyl-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 174818-90-7 HCAPLUS
CN Carbamic acid, [3-[[5-O-[bis(phenylmethoxy)phosphinyl]-D-ribofuranosyl]amino]-3-oxopropyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

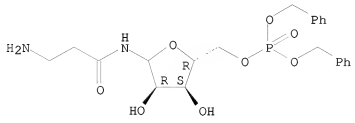
Absolute stereochemistry.



RN 174818-91-8 HCAPLUS

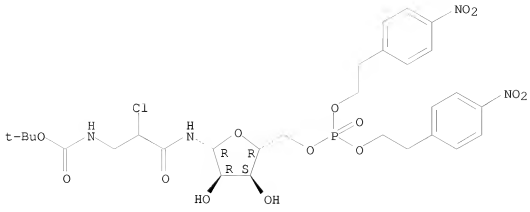
CN Propanamide, 3-amino-N-[5-O-[bis(phenylmethoxy)phosphinyl]-D-ribofuranosyl]- (CA INDEX NAME)

Absolute stereochemistry.



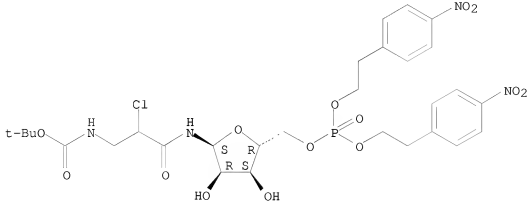
L12 ANSWER 3 OF 4 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Glycinamide ribonucleotide analog probes for glycinamide ribonucleotide transformylase
AB Glycinamide ribonucleotide (GAR) transformylase catalyzes the conversion of glycinamide ribonucleotide and 10-formyltetrahydrofolate to formylglycinamide ribonucleotide and tetrahydrofolate. This reaction constitutes the 3rd step in purine biosynthesis. A series of glycinamide ribonucleotide analogs, in which the glycinamide side chain (R = CH2NH2) has been replaced by R = CH2Br, CH2Cl, CH2CN, CHN2, CHClCH2NH2, and aziridin-2-yl, was prepared All of these analogs were inhibitors of GAR tranformylase, competitive against GAR, but none of these proved to be enzyme inactivators. Neither R = CHClCH2NH2 nor aziridin-2-yl served as substrates for the enzyme-catalyzed transformylation reaction.
AN 1991:444881 HCAPLUS <<LOGINID::20081121>>
DN 115:44881
OREF 115:7705a,7708a
TI Glycinamide ribonucleotide analog probes for glycinamide ribonucleotide transformylase
AU Caperelli, Carol A.; McKellar, B. Robert
CS Coll. Pharm., Univ. Cincinnati, Cincinnati, OH, 45267-0004, USA
SO Bioorganic Chemistry (1991), 19(1), 40-52
CODEN: BOCMBM; ISSN: 0045-2068
DT Journal
LA English
IT 134697-27-1P 134697-45-3P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and deprotection of)
RN 134697-27-1 HCAPLUS
CN Carbamic acid, [3-[[5-O-[bis[2-(4-nitrophenyl)ethoxy]phosphinyl]-β-D-ribofuranosyl]amino]-2-chloro-3-oxopropyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



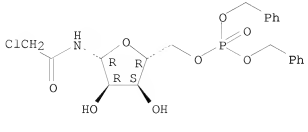
RN 134697-45-3 HCAPLUS
CN Carbamic acid, [3-[[5-O-[bis[2-(4-nitrophenyl)ethoxy]phosphinyl]-α-D-ribofuranosyl]amino]-2-chloro-3-oxopropyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



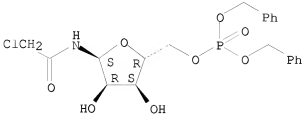
IT 134697-26-0P 134697-44-2P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and hydrogenation of)
RN 134697-26-0 HCAPLUS
CN Acetamide, N-[5-O-[bis(phenylmethoxy)phosphinyl]-β-D-ribofuranosyl]-2-chloro- (CA INDEX NAME)

Absolute stereochemistry.



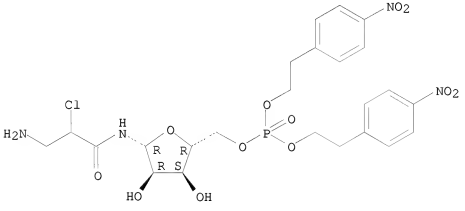
RN 134697-44-2 HCAPLUS
CN Acetamide, N-[5-O-[bis(phenylmethoxy)phosphinyl]-α-D-ribofuranosyl]-2-chloro- (CA INDEX NAME)

Absolute stereochemistry.



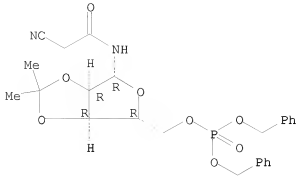
IT 134697-28-2P 134697-31-7P 134697-46-4P
134697-48-6P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and reaction of)
RN 134697-28-2 HCAPLUS
CN Propanamide, 3-amino-N-[5-O-[bis[2-(4-nitrophenyl)ethoxy]phosphinyl]-β-D-ribofuranosyl]-2-chloro- (CA INDEX NAME)

Absolute stereochemistry.



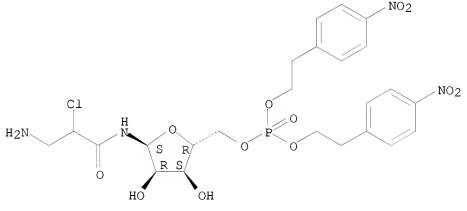
RN 134697-31-7 HCAPLUS
CN Acetamide, N-[5-O-[bis(phenylmethoxy)phosphinyl]-2,3-O-(1-methylethylidene)-β-D-ribofuranosyl]-2-cyano- (CA INDEX NAME)

Absolute stereochemistry.



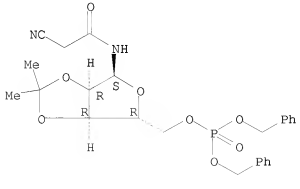
RN 134697-46-4 HCAPLUS
CN Propanamide, 3-amino-N-[5-O-[bis[2-(4-nitrophenyl)ethoxy]phosphinyl]-α-D-ribofuranosyl]-2-chloro- (CA INDEX NAME)

Absolute stereochemistry.

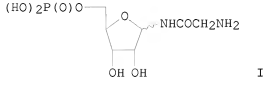


RN 134697-48-6 HCAPLUS
CN Acetamide, N-[5-O-[bis(phenylmethoxy)phosphinyl]-2,3-O-(1-methylethylidene)-α-D-ribofuranosyl]-2-cyano- (CA INDEX NAME)

Absolute stereochemistry.



L12 ANSWER 4 OF 4 HCAPLUS COPYRIGHT 2008 ACS on STN
TI An improved synthesis of glycinamide ribonucleotide
GI



I

AB Glycinamide ribonucleotide (GAR) (I) was obtained in 7 steps in 15% yield from a com. available ribose derivative
AN 1990:36334 HCAPLUS <<LOGINID::20081121>>
DN 112:36334
OREF 112:6305a,6308a
TI An improved synthesis of glycinamide ribonucleotide
AU Boschelli, Diane Harris; Powell, Dennis; Sharky, Veronica; Semmelhack, M. F.
CS Med. Res. Div., Lederle Lab., Pearl River, NY, 10965, USA
SO Tetrahedron Letters (1989), 30(13), 1599-600
CODEN: TELEAY; ISSN: 0040-4039
DT Journal
LA English
OS CASREACT 112:36334
IT 124575-24-2P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and catalytic hydrogenolysis of)
RN 124575-24-2 HCAPLUS
CN Carbamic acid, [2-[[5-O-[bis(phenylmethoxy)phosphinyl]-2,3-O-(1-methylethylidene)-α-D-ribofuranosyl]amino]-2-oxoethyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.